

CLAIMS

1. An electric razor provided with an inner blade and an outer blade to allow a user to shave hair such as beard, whiskers or mustache by nipping the hair between the inner blade and the outer blade while driving either or both the inner blade and the outer blade, the electric razor being operatively changeable between a normal drive mode of allowing the user to shave the hair, and a cleaning drive mode of allowing the user to clean the blade, wherein at least one of a driving frequency, the number of revolutions per unit time, and an amplitude of the blade in the cleaning drive mode is differentiated from a corresponding one in the normal drive mode.

2. The electric razor according to Claim 1, wherein at least one of the driving frequency, the number of revolutions, and the amplitude of the blade in the cleaning drive mode is set smaller than the corresponding one in the normal drive mode.

3. The electric razor according to Claim 1, wherein a maximum instantaneous moving speed of the blade is set at 60m or lower per minute, and at least one of the moving speeds of the blade is instantaneously set at 20m or higher per minute in the cleaning drive mode.

4. The electric razor according to Claim 1, wherein at least one of the driving frequency, the number of revolutions, and the amplitude of the blade in the cleaning drive mode is set larger than the corresponding one in the normal drive mode.

5. The electric razor according to Claim 1, wherein the cleaning drive mode includes multiple drive modes, at least one of the driving frequency, the number of revolutions, and the amplitude of the blade in the one of the multiple drive modes is differentiated from the corresponding one in the other one of the multiple drive modes, and the blade is driven in a combined order of the multiple drive modes.

6. The electric razor according to Claim 1, wherein the electric razor is operated in the normal drive mode in response to turning on of a switch, and is switched over to the cleaning drive mode if a time of the ON-state of the switch is continued for a predetermined time.

7. The electric razor according to Claim 1, wherein driving of the blade is suspended after the blade is driven in the cleaning drive mode for a predetermined time.

8. The electric razor according to Claim 1, wherein driving of the blade is suspended after the blade is driven for a first duration, and the driving of the blade is resumed upon lapse of a second duration after the suspension of the driving of the blade while the electric razor is operated in the cleaning drive mode.

9. The electric razor according to Claim 8, wherein at least one of the driving frequency, the number of revolutions, and the amplitude of the blade

after the driving of the blade is resumed is differentiated from the corresponding one before the driving of the blade is suspended while the electric razor is operated in the cleaning drive mode.

10. The electric razor according to Claim 9, wherein at least one of the driving frequency, the number of revolutions, and the amplitude of the blade after the driving of the blade is resumed is set smaller than the corresponding one before the driving of the blade is suspended while the electric razor is operated in the cleaning drive mode.

11. The electric razor according to Claim 8, wherein after the driving of the blade is resumed, the driving of the blade is suspended after the blade is driven for a third duration while the electric razor is operated in the cleaning drive mode.

12. The electric razor according to Claim 1, wherein the blade is driven with at least one of the driving frequency, the number of revolutions, and the amplitude of the blade at the time of turning on of the switch smaller than the corresponding one in the normal drive mode, the blade is driven in the cleaning drive mode if it is judged that the ON-state time of the switch has reached a predetermined time; and the blade is driven in the normal drive mode if it is judged that the ON-state time of the switch has not reached the predetermined time, and in response to turning off of the switch.

13. The electric razor according to Claim 1, further comprising

notifying means for notifying the user that the electric razor is operated in the cleaning drive mode.

14. The electric razor according to claim 1, further comprising indicating means for integrating a time during which the blade is driven in the normal drive mode after the blade is driven in the cleaning drive mode, and for prompting the user to clean the blade if it is judged that the integration time has reached a predetermined time.